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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/274,496	03/23/1999	PAUL C. KOCHER		8477

7590

07/29/2003

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EXAMINER

SEAL, JAMES

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 07/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/274,496

Applicant(s)

KOCHER, PAUL C.

Examiner

James Seal

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 23 March 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6. 6) ☐ Other:

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DETAILED ACTION

1. This Action is in regards to applicant's correspondence dated 23 March 1999.
2. Claims 1-31 have been cancelled without prejudice.
3. New Abstract is entered.
4. Claims 32-36 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooperman et. al. (U.S. 5613004 A), and further in view of Simmons, Contemporary Cryptology.

5. As per claim 32, Cooperman teaches the limitation of marking digital data with an embedded watermark (Column 13, lines 19-23, applicant's global mask) and at the same time using cryptographic means (i.e. data encryption applicant's override mask) for protecting copyright in the digital domain (Column 4, lines 7-9) and the transmission of such data over a network (Column 3, lines 27-28). Cooperman further teaches the masking of the data using a FFT convolution and hence a global mask (See Column 8, lines 1-9). Cooperman further teaches the combining of the through the process of convolution and the results is used to mark the content data (Column 8, 1-9) in such a way that it can not be removed by removing an arbitrary chunk of data (Column 13,

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lines 19-24). Cooperman further teaches an override mask that is the keys used to encrypt the encrypted digital copyright certificate (Column 5, lines 30-40). Cooperman further teaches the authentication in that the keys are used to determine the validity of the content—the object is authenticated by the “correct” mask (Column 5, lines 38-40 and Column 7, lines 66-67 through Column 8, line 1). Cooperman is silent on the limitation, that the authenticator is obtained by means of a one way function. Simmons teaches the use of hash function for authenticator rather than the entity itself (in this case keys), for example see page 199-202. One of ordinary skill in the art at the time the invention was made would have been motivated to use the hash function instead of the keys for authentication because the hash is compact (usually 160 bits) and faster processing and less chance that keys will be compromised due to exposure. Claim 32 is rejected.

6. As per claim 33, the limitation of additional protection fields describing one or more actions that are authorized by the data mask S, is disclosed by Cooperman (Column 14, lines 13-67). Note in this case fields such as access, distribution, and in particular encryption methods could be used to protect the transfer between entities (column 14, lines 61-63). Claim 33 is rejected.

7. As per claim 34, the limitation that the content data is compress, Cooperman discloses compression column 4, lines 44-49. Claim 34 is rejected.

8. As per claim 35, the limitation that the content data is in encrypted form, is disclosed by Cooperman in for example Column 5, lines 30-40. Claim 35 is rejected.

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9. As per claim 36, the limitation of determining whether a device is authorized to perform a requested action is taught by Cooperman Column 5, lines 30-40 and Column 8, lines 1-10 teach the formation of the global and override mask the the use of an authenticator for an action, Simmons teaches the use of a one-way hash function as a means of authenticating request (199-202), and Column 14, lines 12-67 teaches the carrying out of validated request, in particular saving the mask in the data as a receipt, or it may destroy copy after certain actions have been authenticated (Column 14, lines 56, 60-62). The X', Y' and S' contain the particular action to be authenticated. Claim 36 is rejected.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Seal whose telephone number is 703 308 4562. The examiner can normally be reached on M-F, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gail Hayes can be reached on 703 305 9711. The fax phone numbers for the organization where this application or proceeding is assigned are 703 746 7239 for regular communications and 703 746 7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 3900.

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James Seal

James Seal

Patent Examiner

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July 25, 2003